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ABSTRACT

A manual for assessing the effectiveness of an elementary school , taking differences in the school's resources into account, is presented. The Pennsylvania State Board of Education established the Bureau of Educational Quality Assessment which developed a measurement package in Phase I. Field tests were conducted on grade 5 students in 1968 in 355 elementary schools to provide a basis of comparison in Phase II. Students were tested on progress in relation to 10 educational goals adopted by the state, and the schools were stratified according to building enrollment and average per-pupil expenditure for education. The ten educational goals identified were: Self Understanding, Understanding Others, Basic Skills-Verbal, Basic Skills-Math; Interest in School, Citizenship, Health Habits, Creative Potential, Creative Output, Vocational Development, Appreciating Human Accomplishment, and Preparing for a Changing World. The actual assessment of the schools began in Phase III. The assessment includes information on pupil achievement, teacher questionnaires, a school information form filled out by administrators and the Bureau of Statistics files. Predictions are made of what performance should be expected of students by using regression analysis of school condition variables. Schools are then rated according to how the student achievement related to the predicted scores. (DJ)

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Manual for Interpreting Elementary School Reports

1972-73

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Manual for Interpreting Elementary School Reports

1972-73

by William W. Burson, Research Associate
Bureau of Educational Quality Assessment
Pennsylvania Department of Education
September 1972

Commonwealth of Pennsylvania
Milton J. Shapp, Governor

Department of Education
John C. Pittenger, Secretary

Office of Basic Education
Donald M. Carroll Jr., Commissioner
Harry K. Gerlach, Deputy Commissioner

Bureau of Educational Quality Assessment
Thomas E. Kendig, Director

Pennsylvania Department of Education
Box 911
Harrisburg, Pa. 17126

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INTRODUCTION

This manual is designed to aid the school administrator and staff in the interpretation of the assessment report. It gives a condensed version of the history of educational quality assessment in Pennsylvania, and although it is not intended to be a technical report, the manual gives some general statistical background of Pennsylvania's assessment plan to complement the individual report for each participating school.

In the past the judgment of the quality of a school program has often been determined by proxy measures such as the physical plant facilities, the percentage of graduates going to college, the number of Merit Scholars and other factors which, although they may suggest the quality of the educational product, do not control for differing surrounding conditions and may mistakenly or unjustly give the school blame or credit. In short, we have been quick to judge but slow to devise adequate criteria for judging.

To carry out a broader-based plan of educational assessment, people must agree on the goals of education, yardsticks by which to measure them, and a means of controlling for the vast differences in the resources or *"inputs"* among schools in the state--or even within a district.

In the Commonwealth of Pennsylvania the goals were determined by the State Board of Education. Rather than restricting themselves to just basic skills--the reading, writing, arithmetic approach--the goals encompass the affective domain as well, recognizing a broader mission for the schools--that of educating the whole child.

It was decided that the best way to measure the quality of education in a school was to assess the product, i.e., the students themselves. Recognizing the unfairness of comparing a well-equipped school with experienced, well-paid teachers to its polar opposite, differences in resources [as many as 44] were taken into account.

To interpret a school report, the school personnel must thoroughly acquaint themselves with the goals, the dimensions measured on each goal instrument, the condition variables measured and the method used plus the form in which these results are reported for each school. It is the purpose of this manual to assist in the acquisition of this knowledge.

BACKGROUND

The Pennsylvania plan of assessment had its legal beginning in 1963 with the passage of Act 299 which required the State Board of Education to

> *develop or cause to be developed an evaluation procedure designed to measure objectively the adequacy and efficiency of the educational programs offered by the public schools of the Commonwealth.... The evaluation procedure shall be so constructed and developed as to provide each school district with relevant comparative data to enable directors and administrators to more readily appraise the educational performance and to effectuate without delay the strengthening of the district's educational program.*

To carry out these mandates the State Board of Education Committee on Quality Education, after conferring with civic and professional leaders from throughout the state, adopted the following as the 10 goals of quality education.

I. Quality education should help every child acquire the greatest possible understanding of himself and an appreciation of his worthiness as a member of society.

II. Quality education should help every child acquire understanding and appreciation of persons belonging to social, cultural and ethnic groups different from his own.

III. Quality education should help every child acquire to the fullest extent possible for him, mastery of the basic skills in the use of words and numbers.

IV. Quality education should help every child acquire a positive attitude toward the learning process.

V. Quality education should help every child acquire the habits and attitudes associated with responsible citizenship.

VI. Quality education should help every child acquire good health habits and an understanding of the conditions necessary for the maintaining of physical and emotional well-being.

VII. Quality education should give every child opportunity and encouragement to be creative in one or more fields of endeavor.

VIII. Quality education should help every child understand the opportunities open to him for preparing himself for a productive life and should enable him to take full advantage of these opportunities.

IX. Quality education should help every child to understand and appreciate as much as he can of human achievement in the natural sciences, the social sciences, the humanities and the arts.

X. Quality education should help every child to prepare for a world of rapid change and unforeseeable demands in which continuing education throughout his adult life should be a normal expectation.

PHASE I

In June 1967 the Bureau of Educational Quality assessment was created to translate the mandates and the 10 goals into a workable plan of assessment.

The primary purpose of Phase I was development and field-testing of a measurement package. Measurement instruments for the goals were selected in some instances from previously published tests. In other areas new tests and questionnaires were developed by EQA Bureau staff in cooperation with the Bureau of Research and national testing firms.

In April 1968 the measurement package was pilot-tested in 100 schools in the Commonwealth. The elementary school package was administered to 1413 5th graders and the high school package to 1285 11th graders.

After the initial field-testing, items from the questionnaire were analyzed, reworded or deleted. Testing procedures in the schools were also refined. Table 1 summarizes the characteristics of the final assessment instruments.

Furthermore, surrounding conditions differ–in the home, the school and the community--and impose unavoidable constraints on what a school can accomplish with its pupils. Recognizing that schools operate within the limits of vastly differing conditions, these differences in programs and resources, both teacher and student, had to be identified and measured. Phase I was designed to measure relationships among what pupils bring with them, what the community, school and staff can offer, and what pupils achieve.

TABLE 1
GRADE 5 SUMMARY OF INSTRUMENTS

GOAL	DIMENSIONS	SECTION	NUMBER OF ITEMS	POSSIBLE RANGE OF SCORES
I Self Understanding	Control of environment--confidence in one's ability to fulfill ambitions. Self-confidence in personal attributes--feelings of self adequacy. Achieving in school--one's role or image in school situation. Relating to others--one's relationship with parents and impression on others.	E	53	53-106
II Understanding Others	Interaction with those who differ from themselves in: Race Religion Economic status	D	9	9-45
III-V Basic Skills Verbal	Verbal analogies.	LPL	30	0-30
III-M Basic Skills Math	Arithmetic computation. Arithmetic concepts.	LPL	30	0-30
IV Interest in School	Perception of the school climate--attitudes about teachers, school facilities and course offerings. Attitude toward school assignments--opinions about homework, reading, writing and studying. Perception of the learning process--attitudes about teacher methods and school in general.	H	17	17-85
V Citizenship	Situational ethics--what one would do when confronted with cheating, rule-breaking, losing or finding articles, and helping others. Attitudes toward personal responsibility issues--what one's attitude is toward cheating, rule-breaking, etc. Concern for democratic principles--opinions on civil rights, freedom of speech, etc. Initiative in advocating change--would one criticize established order to effect change.	I	44	44-220
VI Health Habits	Knowledge of desirable health habits in areas of personal hygiene, first aid, food and nutrition, alcohol, smoking, drugs, environmental hazards.	C	48	0-48

TABLE 1 (continued)
GRADE 5 SUMMARY OF INSTRUMENTS

GOAL	DIMENSIONS	SECTION	NUMBER OF ITEMS	POSSIBLE RANGE OF SCORES
VII Creativity	Degree of self-direction; evaluative ability. Originial, flexible and elaborative thinking. Willingness to take risks. Ease with complex ideas, knotty problems.	F	39	39-195
VIII Vocational Development	Perception of work and satisfactions derived therefrom. The role choice plays in occupational planning. Independence from parents in making work decisions.	G	39	39-78
IX Appreciating Human Accomplishments	Students indicated the importance to them and whether they wanted to participate actively or passively in politics, science, sports, literature, art, music and theater.	A	21	21-63
X Preparing for a Changing World	Students were asked to project themselves into the future and indicate their degree of comfort with sweeping changes in societal regulations, particularly those related to schooling.	B	29	29-145

PHASE II

To provide normative standards on a state representative sample, Pennsylvania schools were stratified according to building enrollment and the average per-pupil expenditure for education in the county. The field-tested and refined measurement packages [Table 1] were administered to students in 5th and 11th grades of schools randomly selected within these strata. This normative sample from 268 school districts represented 10 per cent of the student population in grades 5 and 11-20,000 students and 17,000 students, respectively, in 355 elementary and 73 high schools. School mean scores, student distributions and item distributions were calculated and norms established.

In each goal area the school mean is calculated by computing the average raw score of all 5th grade students in that school who completed the questionnaire or test. These school means are then rank ordered [high to low] and then divided into 100 equal parts or percentiles [Table 2]. Each part has an equal number (one per cent) of the total scores. For example, if a school mean score on Self Understanding was 87.64, the school would rank in the 65th percentile–65 per cent of the schools in the normative sample had lower scores, 35 per cent had higher scores.

In addition to the items designed to measure pupil performance on the 10 goals, students answered questions about their family background, their interests and the accessibility of school resources. At the same time teachers anonymously completed a questionnaire [Appendix A] to assess their backgrounds, classroom practices and attitudes. Teacher data on file with the Bureau of Statistics were tapped. In addition, building administrators replied to a form [Appendix B] requesting information about the school and the community it serves.

Table 2

PENNSYLVANIA SCHOOL NORMS-GRADE 5

PERCENTILE DISTRIBUTION	Percentile Rank	INSTRUMENT											Percentile Rank
		SELF UNDERSTANDING	UNDERSTANDING OTHERS	BASIC SKILLS: VERBAL	BASIC SKILLS: MATH	INTEREST IN SCHOOL	CITIZENSHIP	HEALTH HABITS	CREATIVITY	VOCATIONAL DEVELOPMENT	APPRECIATING HUMAN ACCOMPLISHMENT	PREPARING FOR A CHANGING WORLD	
	Above												Above
	95	90.95	34.75	19.10	20.18	62.75	171.12	31.96	145.67	62.57	54.21	108.80	95
	90	89.94	34.23	18.39	19.74	61.88	168.65	31.16	144.46	61.87	53.76	106.52	90
	85	89.19	33.82	17.83	19.32	61.15	167.22	30.54	143.28	61.42	53.33	105.07	85
	80	88.74	33.59	17.48	19.05	60.70	166.37	30.23	142.34	61.14	53.00	104.19	80
	75	88.32	33.36	17.13	18.78	60.25	165.53	29.91	141.48	60.87	52.66	103.31	75
	70	87.94	33.12	16.82	18.51	59.82	164.69	29.59	140.62	60.63	52.47	102.53	70
	65	87.64	32.92	16.62	18.33	59.51	163.85	29.29	139.88	60.46	52.31	102.03	65
	60	87.35	32.73	16.41	18.15	59.21	163.03	29.02	139.20	60.29	52.16	101.43	60
	55	87.06	32.54	16.21	17.97	58.90	162.21	28.75	138.53	60.12	52.00	100.84	55
	50	86.78	32.34	[illegible]	[illegible]	58.60	161.39	28.48	137.85	59.94	51.83	100.23	50
	45	86.50	32.17	15.78	17.59	58.28	160.57	28.21	137.17	59.76	51.69	99.85	45
	40	86.22	32.00	15.51	17.35	57.96	159.40	27.85	136.49	59.57	51.52	99.36	40
	35	85.94	31.83	15.25	17.11	57.64	158.01	27.48	135.80	59.38	51.36	98.87	35
	30	85.65	31.66	14.98	16.88	57.32	156.62	27.11	135.12	59.19	51.19	98.37	30
	25	85.37	31.44	14.65	16.62	56.96	155.12	26.67	134.18	58.95	51.03	97.81	25
	20	85.09	31.12	14.30	16.35	56.43	153.61	26.19	133.17	58.63	50.73	97.26	20
	15	84.80	30.80	13.89	16.06	55.89	151.79	25.68	132.09	58.32	50.42	96.70	15
	10	84.20	30.28	13.29	15.53	54.98	149.57	24.91	130.56	57.81	50.03	96.03	10
	5	83.31	29.64	12.54	14.43	53.36	146.40	23.73	128.06	57.18	49.46	94.10	5
	Below												Below
STATE MEAN		86.90	32.33	15.91	17.68	58.45	160.25	28.20	137.64	59.90	51.80	100.76	
STANDARD DEVIATION		2.21	1.56	1.89	1.69	2.76	7.49	2.44	5.32	1.60	1.60	4.57	

PHASE III

Phase III, the actual assessment of schools, began in the fall of 1970 with the participation of 110 school districts selected on a first come, first served basis from the more than 300 districts that requested assessment. The overwhelming response has forced the bureau, because of budget restraints, to turn away districts every one of the three years Phase III has been in operation. The following numbers describe the scope of assessment in Pennsylvania to date:

School year	#districts	#schools	#students
1970-71	110	533	50,000
1971-72	49	225	23,000
1972-73	84	474	56,000

Each fall, just as in the normative study [Phase II] in 1969, 5th and 11th grade students respond to the items in the Pennsylvania Questionnaires. Since the school–not the district or the individual student–is the unit of analysis, students are not identified by name nor are scores aggregated by district. The student booklets are machine-read and scored and the information aggregated for the school.

Sample teachers* anonymously respond to a Teacher Questionnaire [Appendix A] designed to supply data on their background, classroom practices and attitudes. Building administrators complete the School Information Form [Appendix B]. Bureau of Statistics files are tapped.

Data from these four sources are then merged, compared to the responses of the reference group from Phase II and entered into an extremely complex computer program to generate a separate report for each participating school.

*In participating elementary schools all the 5th grade teachers or a minimum of five teachers was sampled.

CONDITION VARIABLES

Tables 3, 5 and 7 describe the variables which were measured to identify the differences in resources among schools. It is extremely important to note both the name of the variable and how it was measured (from whom the data were obtained and the weightings used to quantify the information).

"High" scores for a school on these variables are not necessarily *"good."* The numbers attached to these variables are designed to reflect the presence or absence of the characteristic in question or merely to differentiate by quantification one class within the characteristic from another.

One must avoid hasty value judgments regarding a school's standing on a given condition variable without being aware of the interrelationships among the variables. When calculating average teacher salary, for example, one is also measuring teacher experience, teacher education and possibly teacher age. Therefore, a high average salary might at first suggest a high salary schedule when, in fact, it might be due to the presence of a large proportion of experienced teachers with a large number of years of formal schooling.

The percentile score associated with the variable gives the participating school's rank compared to the Phase II normative schools in 1969*. Financial figures for districts have been updated as noted in Table 3.

One other caveat worth noting is apparent on the norms charts (Tables 4, 6, 8): When using school means, the range of values can at times be very narrow so that a small incremental change in the values can translate into large percentile rank changes (e.g., GUIDANCE, INTERRAC, HOLDING).

*The only exception is TSALARY where the percentile score is the rank of the school's mean teacher salary compared to the other Phase III schools participating in 1972.

Table 3

SCHOOL AND COMMUNITY INDICES

CLASS OF CHARACTERISTIC	VARIABLE NAME	MEASURE	WEIGHTING	INDEX DESCRIPTION
Program Resources	STAFFP (Staff: pupil ratio)	The number of personnel who spend at least one-half their time in instructional activity was divided by the total number of students in the school.		A higher value indicates more instructional personnel per pupil.
	BOOKSP (Books: pupil ratio)	The number of library books available for student checkout was divided by the total number of pupils in the school.		A higher value indicates more library books available for each pupil.
	INNOVATE (School innovation)	The school administrator reported the extent to which his school employed 12+ relatively new educational practices (e.g. individual study, nongraded classes, instructional TV).	5 = Use regularly 4 = Use occasionally 3 = Considered trying 2 = Don't agree 1 = Never tried	A higher score on this index indicates the school uses several innovative practices regularly and/or many of the practices at least occasionally.
	LIBRARY (Accessibility of library)	Students were asked how often they were able to use the school library.	5 = Often as needed 4 = Frequently 3 = Several days a week 2 = Only when class is scheduled 1 = No library in school	A higher score on this index indicates that the school offers freer accessibility to its library resources.
Financial Resources	SUBSIDY (School subsidy per WADM)	The state instructional subsidy paid to the school district was divided by the Weighted Average Daily Membership of the district. All schools participating from district were assigned this score.	Expressed in whole dollars paid in 1971-72	A higher value indicates that the school of interest is in a district which received more state funds to supplement its instructional activities.
	INSEXADM (Instructional expenses per ADM)	The instructional expenses of the district were divided by the Average Daily Membership of the district. All schools participating from district were assigned this score.	Expressed in whole dollars paid in 1970-71	A higher value indicates that the school of interest is in a district which expends relatively more funds per pupil for instruction.
	EFFORT (Tax Effort Index)	Budgeted school taxes for the district were divided by the market values. All schools participating from district were assigned this score.	Expressed in mills for 1971-72	A higher value indicates that the school of interest is in a district which has a greater willingness to tax itself for educational purposes.
Demographic	ENROLL (School Enrollment)	The administrator reported the total school enrollment as of October 1 of a given year.		The number indicates the building enrollment.
	LOCATION (Predicted achievement index by location)	Secondary students reported the type of community in which they were then living. Due to substantial misinterpretation of this item by 5th grade pupils in the normative study, the EQA staff assigned scores to elementary schools based upon knowledge of size and location of the communities from which the school drew its students. In subsequent school studies, elementary pupils were aided by the teacher in reporting their community type.	8 = Suburb of city (over 500,000) 7 = Suburb of city (100,000-500,000) 6 = Suburb of city (10,000-100,000) 5 = Inside city (10,000-100,000) 4 = Inside city (100,000-500,000) 3 = Inside town less than 10,000 2 = Inside city over 500,000 1 = Open country or farming community	A higher score on this index indicates that the school is drawing a larger proportion of its students from suburban rather than rural or urban areas.
	INTERRAC (Interracial exposure)	Students reported whether or not they came in contact with students of a race different from their own in their classes or school activities.	2 = Yes 1 = No	A higher value on this index indicates greater interracial exposure in school.
	HOUSING (Types of residences in school's community)	The school administrator reported the percentage of various types of housing units in the area served by the school.	6 = Expensive private homes 5 = High-rental apartments 4 = Moderate-priced homes 3 = Moderate-rental apartments 2 = Low-cost homes 1 = Low-rental apartments	A higher value on this index indicates that the school serves an area that has a relatively larger proportion of expensive private homes and/or apartments.

Table 4

PERCENTILE DISTRIBUTION OF SCHOOL AND COMMUNITY INDICES FOR ELEMENTARY SCHOOLS

PERCENTILE DISTRIBUTION	Percentile Rank	CHARACTERISTICS											Percentile Rank
		PROGRAM RESOURCE				FINANCIAL RESOURCE			DEMOGRAPHIC				
		STAFFP	BOOKSP	INNOVATE	LIBRARY	SUBSIDY	INSEXADM	EFFORT	ENROLL	LOCATION	INTERAC	HOUSING	
	Above												Above
	95	.052	28.64	46.22	4.61	517	668	34.75	851	5.92	1.83	4.33	95
	90	.049	18.59	42.69	4.49	489	616	31.92	714	4.96	1.74	4.18	90
	85	.046	16.54	40.13	4.36	463	582	30.18	592	4.65	1.66	4.04	85
	80	.045	14.49	38.75	4.24	450	568	29.28	531	4.34	1.59	3.93	80
	75	.043	12.44	37.38	4.11	438	553	28.39	473	3.58	1.54	3.83	75
	70	.042	11.06	36.05	3.98	426	543	27.54	429	3.14	1.49	3.74	70
	65	.041	10.39	34.99	3.85	414	533	26.71	387	2.80	1.45	3.65	65
	60	.040	9.72	33.94	3.71	402	522	25.90	345	2.50	1.42	3.54	60
	55	.039	9.06	32.89	3.56	390	514	25.37	309	2.29	1.39	3.43	55
	50	.038	8.39	31.86	3.42	378	508	24.95	274	2.08	1.37	3.33	50
	45	.037	7.72	30.88	3.28	364	500	24.53	238	1.87	1.35	3.22	45
	40	.036	7.05	29.90	3.15	352	493	24.11	211	1.68	1.33	3.11	40
	35	.036	6.39	28.91	3.02	340	487	23.69	193	1.57	1.30	3.00	35
	30	.035	5.72	27.88	2.92	328	479	23.19	174	1.47	1.28	2.89	30
	25	.034	5.05	26.62	2.82	310	470	22.53	155	1.36	1.25	2.71	25
	20	.033	4.39	25.37	2.72	287	462	21.88	137	1.26	1.22	2.53	20
	15	.033	3.72	24.11	2.60	262	453	21.22	118	1.15	1.19	2.37	15
	10	.032	3.05	21.38	2.38	233	440	20.16	99	1.05	1.14	2.21	10
	5	.029	0.93	16.67	2.08	203	426	19.03	38	1.00	1.06	1.98	5
	Below												Below
STATE MEAN		0.039	11.38	32.16	3.43	369	520	25.66	343	2.56	1.40	3.25	
STATE STANDARD DEVIATION		0.007	16.84	8.07	0.79	93	69	4.53	244	1.72	0.22	0.73	

Table 5

INSTRUCTIONAL STAFF INDICES

CLASS OF CHARACTERISTIC	VARIABLE NAME	MEASURE	WEIGHTING	INDEX DESCRIPTION
Background	TMEDUC (Educational level of teacher's mother)	Sample teachers reported the highest level of formal education attained by their mother or female guardian.	9 = Completed Ph.D. or professional degree 8 = Some work toward Ph.D. or professional degree 7 = Masters degree 6 = Graduated, college 5 = Some post-high school 4 = Graduated, high school 3 = Some secondary 2 = Elementary 1 = No formal education	A higher value on this index indicates that the mothers of the school's instructional staff have attained a higher level of formal education.
	TFOCC (Occupational level of teacher's father)	The sample teachers reported the occupational category of their father or principal wage earner while they were growing up.	9 = Professional; doctor, lawyer 8 = Accountant, or manager 7 = Teacher 6 = Owner of small business 5 = White-collar 4 = Farmer 3 = Skilled worker 2 = Semi-skilled worker 1 = Unskilled	A higher value on this index indicates that the school's instructional staff comes from backgrounds in which the family's principal wage earner tended to be professional or white-collar workers as opposed to semi-skilled or unskilled.
	TLOCALE (Teacher locale)	Sample teachers reported where they graduated from high school.	5 = This town or immediate area 4 = In state but outside this town 3 = In another state 2 = In Puerto Rico or other U. S. possession 1 = In another country	A higher value on this index indicates that the school draws its instructional staff from the local area as opposed to other states or countries.
	TCOLLEGE (Teacher's college)	Sample teachers reported whether or not they had earned a college degree and the type of college from which they graduated.	3 = Liberal arts college or university 2 = State college 1 = No degree	A higher score on this index indicates that more of the staff have degrees and are more likely to have attended a liberal arts college or university than a state college.
	TEDUC* (Teacher's education)	The level of training of all teachers was obtained from the Professional Personnel Record.	9 = Doctor's degree 8 = Master's degree plus 2 years 7 = Master's degree plus 1 year 6 = Master's degree 5 = Bachelor's degree plus 1 year 4 = Bachelor's degree 3 = Three years of college 2 = Two years of college 1 = One year of college 0 = No college	A higher score on this index indicates that the school's instructional staff has a higher level of formal education.
	TSTABL (Teacher stability)	Sample teachers reported the area in which they spent most of their lives.	Response alternatives and respective weightings were identical to TLOCALE.	A higher value on this index indicates that the school's instructional staff have spent most their lives in the immediate area as opposed to other states or countries.
Demographic	TAGE (Teacher's age)	Each sample teacher indicated his age by checking one of nine 5-year age categories.	9 = 60 or over 8 = 55-59 7 = 50-54 6 = 45-49 5 = 40-44 4 = 35-39 3 = 30-34 2 = 25-29 1 = 20-24	This index reflects the mean age, by categories, of a school's instructional staff.
	TSEX* (Teacher sex)	The sex of each teacher was obtained as reported in the Professional Personnel Record.	2 = Female 1 = Male	A higher value on this index represents a higher proportion of female teachers within the school.
	TEXPER* (Teacher experience)	The total years of service in education was obtained for each teacher from the Professional Personnel Record.		This number represents the mean educational experience, in years, of the school's instructional staff.

* Collected for *all* teachers in the school.

Table 5 (continued)

INSTRUCTIONAL STAFF INDICES (continued)

CLASS OF CHARACTERISTIC	VARIABLE NAME	MEASURE	WEIGHTING	INDEX DESCRIPTION
Demographic	TPPOS (Teacher present position)	Each sample teacher reported the number of years he had completed in his present position.	8 = 20 or more years 7 = 16-20 years 6 = 11-15 years 5 = 6-10 years 4 = 3-5 years 3 = 2 years 2 = 1 year 1 = Less than 1 year	This index reflects the degree to which a school's instructional staff have remained in their present positions.
	TSALARY* (Teacher salary)	The salary for each teacher was obtained from the Professional Personnel Record.		This value represents the mean salary for a school's instructional staff.
Attitudinal	TSATIS (Teacher satisfaction)	Each sample teacher responded to a 6-item questionnaire which was scaled to reflect the degree of his satisfaction with his role in the school. (Example: "I find my job exciting and rewarding.")	5 = Almost always 4 = Frequently 3 = Sometimes 2 = Infrequently 1 = Almost never	A higher value on this index indicates a greater degree of job satisfaction of the school's instructional staff.
	CLPRACT (Teacher classroom practices)	Each sample teacher reported the extent to which he employed 11 "innovative" classroom practices (e.g., pupil participation in lesson planning).	5 = Use regularly 4 = Use occasionally 3 = Considered its use 2 = Never use 1 = Don't agree with practice	The value on this index indicates the extent to which relatively innovative classroom practices are employed by the sample teachers.
	REACTL (Perception of actual characteristics influencing professional recognition)	From a list of 7 characteristics, the sample teacher chose the one he felt was *actually* most important in gaining professional recognition in his school district.	7 = Rapport with central office 6 = Rapport with immediate supervisor 5 = Formal education 4 = Seniority 3 = Imaginativeness 2 = Dependability 1 = Quality and quantity of work	A higher value on this index indicates that the instructional staff perceives professional recognition to be achieved through personal relationships as opposed to quality and quantity of work completed.
	RECIDEA (Perception of "ideal" characteristics influencing professional recognition)	From a list of 7 characteristics, sample teachers chose the one they felt should *ideally* be most important in gaining professional recognition in their school district.	Same codes were used as for REACTL.	A higher value on this index indicates that the instructional staff feels that ideally professional recognition is obtained through personal relationships as opposed to quality and quantity of work completed.
	TCAREER (Teacher career)	Sample teachers selected from ten choices what they would like to be doing five years from now.	10 = Will be retired 9 = Teacher 8 = Special services 7 = Research worker 6 = Guidance 5 = Curriculum director 4 = Principal 3 = Administrator in central office 2 = Superintendent 1 = Out of education	A higher score on this index indicates that the career aspirations of the instructional staff tend toward classroom involvement.
	DISCREP (Discrepancy)	Sample teachers rated the relative influence 14 groups (superintendent, parents, teachers, etc.) had on the educational process. They then rated the *ideal* influence of each of those groups. For each of the 14 groups a real-ideal discrepancy was computed. A total discrepancy score was obtained: $D = \sqrt{\Sigma d^2}$	5 = Great deal 4 = Considerable 3 = Some 2 = Little 1 = None	A higher discrepancy score indicates a greater disparity between what the instructional staff sees as the actual and the ideal influences various groups have in determining educational matters in the school.

* Collected for *all* teachers in the school.

TABLE 5 (continued)
INSTRUCTIONAL STAFF INDICES (Summary)

ACRONYM	VARIABLE NAME
TMEDUC	Educational level of the teacher's mother
TFOCC	Occupational level of the teacher's father
TLOCALE	Teacher locale
TCOLLEGE	Teacher's college
TEDUC	Teacher's education
TSTABL	Teacher stability
TAGE	Teacher age
TSEX	Teacher sex
TEXPER	Teacher experience
TPPOS	Teacher present position
TSALARY	Teacher salary
TSATISF	Teacher satisfaction
CLPRACT	Teacher classroom practices
REACTL	Perception of actual characteristics influencing professional recognition
RECIDEA	Perception of "ideal" characteristics influencing professional recognition
TCAREER	Teacher career
DISCREP	Discrepancy

Table 6

PERCENTILE DISTRIBUTION OF INSTRUCTIONAL STAFF INDICES FOR ELEMENTARY SCHOOLS

PERCENTILE DISTRIBUTION	Percentile Rank	CHARACTERISTICS																	Percentile Rank
		BACKGROUND						DEMOGRAPHIC					ATTITUDINAL						
		THEDUC	TFOCC	TLOCALE	TCOLLEGE	TEDUC	TSTABL	TAGE	TSEX	TEXPER	TPPOS	TSALARY	TSATISF	CLPRACT	REACTL	RECIDEA	TCAREER	DISCREP	
	Above																		Above
	95	5.18	6.36	5.00	3.00	4.78	5.00	8.10	2.00	27.90	7.34	10615	25.90	46.74	6.33	2.90	9.75	6.26	95
	90	4.81	5.82	5.00	2.93	4.59	5.00	7.31	2.00	24.12	6.60	10365	24.81	45.92	5.39	2.53	9.34	5.61	90
	85	4.52	5.46	4.78	2.65	4.43	4.96	6.75	2.00	22.23	6.05	10160	23.98	45.10	4.90	2.27	9.02	5.29	85
	80	4.36	5.14	4.74	2.59	4.31	4.91	6.40	1.99	20.80	5.77	10024	23.52	44.64	4.44	2.08	8.84	4.97	80
	75	4.24	4.83	4.68	2.53	4.19	4.73	6.13	1.97	19.54	5.50	9902	23.07	44.19	4.03	1.93	8.67	4.80	75
	70	4.12	4.62	4.64	2.47	4.13	4.64	5.86	1.93	18.32	5.27	9780	22.67	43.73	3.68	1.80	8.49	4.65	70
	65	4.00	4.44	4.60	2.41	4.07	4.60	5.57	1.90	17.31	5.11	9663	22.38	43.28	3.40	1.69	8.32	4.49	65
	60	3.83	4.26	4.49	2.36	4.02	4.56	5.18	1.88	16.30	4.95	9552	22.10	42.81	3.12	1.61	8.12	4.33	60
	55	3.66	4.07	4.35	2.31	3.97	4.53	4.79	1.86	15.29	4.79	9441	21.81	42.34	2.91	1.55	7.86	4.17	55
	50	3.48	3.89	4.30	2.25	3.92	4.49	4.50	1.85	14.52	4.63	9329	21.52	41.87	2.73	1.49	7.60	4.04	50
	45	3.32	3.71	4.25	1.99	3.86	4.44	4.25	1.83	13.74	4.44	9218	21.17	41.41	2.56	1.42	7.34	3.91	45
	40	3.16	3.53	4.20	1.95	3.76	4.39	4.00	1.81	12.96	4.25	9107	20.78	40.95	2.38	1.36	7.02	3.78	40
	35	3.02	3.36	4.15	1.91	3.67	4.34	3.75	1.79	12.18	4.06	8996	20.40	40.50	2.19	1.31	6.69	3.65	35
	30	2.91	3.19	4.11	1.88	3.57	4.29	3.43	1.77	11.39	3.87	8881	20.00	40.04	1.94	1.26	6.36	3.52	30
	25	2.81	3.02	4.06	1.84	3.49	4.02	3.10	1.75	10.59	3.59	8753	19.53	39.37	1.69	1.22	6.05	3.37	25
	20	2.70	2.85	4.02	1.80	3.40	3.96	2.77	1.72	9.79	3.31	8625	19.06	38.64	1.44	1.18	5.73	3.17	20
	15	2.60	2.64	3.98	1.73	3.31	3.90	2.41	1.69	8.99	3.00	8496	18.54	37.82	1.23	1.13	5.38	2.98	15
	10	2.24	2.32	3.93	1.62	3.17	3.84	2.04	1.65	7.64	2.65	8273	17.87	36.87	1.02	1.09	4.91	2.78	10
	5	1.94	1.96	3.59	1.47	2.96	3.71	1.55	1.53	6.26	2.17	7954	16.85	35.50	1.00	1.04	3.81	2.38	5
	Below																		Below
STATE MEAN		3.52	4.08	4.36	2.23	3.87	4.46	4.68	1.82	15.33	4.60	8488	21.41	41.67	3.03	1.69	7.30	4.19	
STATE STANDARD DEVIATION		0.93	1.34	0.43	0.45	0.06	0.43	1.92	0.17	6.40	1.48	693	2.70	3.44	1.60	0.69	1.79	1.52	

Table 7

STUDENT INDICES

CLASS OF CHARACTERISTIC	VARIABLE NAME	MEASURE	WEIGHTING	INDEX DESCRIPTION
Background	FOCC (Father's occupation)	The sample 11th grade student reported his father's occupation from a list of 143 possible occupations. On the elementary level the student's teacher completed this item.	The occupational categories were weighted from 0 to 96 according to a combination of education needed to secure the occupation and income derived from the occupation.	A higher value on this index indicates that the school tends to draw a large proportion of its students from homes where the fathers are employed in higher-paying jobs requiring a higher educational level.
	MOCC (Mother's occupation)	The sample 11th grade student reported his mother's occupation from a list of 143 possible occupations. On the elementary level the student's teacher completed this item.	Using mothers who were gainfully employed (i.e., excluding housewives, mothers in school, pensioned, or deceased), a mean was calculated for each sample school. Weights applied were identical to those used in FOCC.	A school high on this index draws a greater proportion of its students from homes in which the working mothers are more likely to be employed in higher-paying jobs and/or jobs requiring a higher educational level.
	PCTMW (Percentage of mothers working)	From the sample student's report of MOCC, the percentage of working mothers was calculated.		This score reflects the percentage of working mothers.
	FAMSES (Family socioeconomic status)	The family socioeconomic status for a school was calculated by the formula: $\frac{(\Sigma \text{ FOCC for } n_1 \text{ fathers} + \Sigma \text{ MOCC for } n_2 \text{ mothers})}{\text{greater of } n_1 \text{ and } n_2}$		This index is a composite of MOCC and FOCC levels of the school.
	MEDUC (Mother's education)	The sample 11th grade student reported the highest level of formal education attained by his mother or female guardian. On the elementary level the student's teacher completed this item.	The same weighting system was used as for TMEDUC.	A higher value on this index indicates that the school draws students from homes in which the mothers have attained a higher average level of formal education.
	FEDUC (Father's education)	The student reported the highest level of formal education attained by his father or male guardian. On the elementary level the student's teacher completed this item.	The same weighting system was used as for TMEDUC.	A higher value on this index indicates that the school draws students from homes in which the fathers have attained a higher average level of formal education.
Demographic	SEX (Sex of students)	The sample student reported his or her sex.	2 = Female 1 = Male	A higher value on this index represents a higher proportion of female students.
	RACE (Predicted achievement index by race)	From a list of six ethnic and racial categories each sample student chose the category that best described him.	6 = Oriental 5 = White 4 = American Indian 3 = Puerto Rican 2 = Black 1 = Other	This variable was scaled in such a way that the index is a predicted-achievement index by racial composition. Weights were assigned on the basis of the groups' rank-order achieved scores as reported by Coleman.
	ATTEND (Attendance)	The sample student reported the number of days he was absent during the past school year.	5 = None 4 = 1-5 days 3 = 6-10 days 2 = 11-15 days 1 = 16 or more days	A higher value on this index represents a greater degree of student attendance within the school.

Table 8

PERCENTILE DISTRIBUTION OF STUDENT INDICES FOR ELEMENTARY SCHOOLS

PERCENTILE DISTRIBUTION	Percentile Rank	CHARACTERISTICS									Percentile Rank
		BACKGROUND						DEMOGRAPHIC			
		FOCC	MOCC	PCTMIN	FAMSES	MEDUC	FEDUC	SEX	RACE	ATTEND	
	Above										Above
	95	54.14	54.07	50.07	63.21	4.52	5.03	1.658	5.04	4.31	95
	90	46.57	49.27	43.03	55.51	4.29	4.63	1.596	5.02	4.24	90
	85	42.41	45.53	38.27	50.65	4.18	4.35	1.577	5.01	4.16	85
	80	39.52	43.32	36.15	47.72	4.07	4.14	1.561	5.00	4.11	80
	75	37.05	41.27	34.03	44.87	4.00	4.07	1.545	4.98	4.06	75
	70	35.72	39.23	32.03	42.77	3.95	4.00	1.532	4.97	4.01	70
	65	34.49	37.46	30.49	41.08	3.90	3.94	1.520	4.96	3.98	65
	60	33.07	35.71	28.95	39.39	3.84	3.87	1.509	4.94	3.94	60
	55	31.76	33.96	27.41	37.70	3.79	3.80	1.498	4.93	3.91	55
	50	30.54	32.19	25.83	36.01	3.74	3.74	1.486	4.92	3.87	50
	45	29.31	30.38	23.86	34.32	3.70	3.68	1.476	4.90	3.83	45
	40	28.09	28.57	21.89	32.62	3.65	3.62	1.465	4.89	3.79	40
	35	26.87	26.77	19.92	30.93	3.60	3.56	1.454	4.88	3.74	35
	30	25.61	25.08	17.98	29.26	3.56	3.50	1.443	4.86	3.69	30
	25	24.36	23.38	16.04	27.60	3.51	3.43	1.430	4.85	3.64	25
	20	23.10	21.69	14.10	25.93	3.43	3.32	1.413	4.83	3.59	20
	15	21.85	19.58	11.50	24.26	3.33	3.20	1.396	4.74	3.53	15
	10	19.66	16.94	8.46	21.13	3.23	3.09	1.372	4.63	3.39	10
	5	16.68	13.48	4.35	17.89	3.00	2.77	1.316	4.26	3.24	5
	Below										Below
STATE MEAN		32.02	32.95	26.00	37.29	3.77	3.80	1.49	4.84	3.85	
STATE STANDARD DEVIATION		10.76	12.21	12.66	13.15	0.54	0.71	0.10	0.42	0.33	

HOW PREDICTIONS ARE MADE

It must be remembered that although a school's standing on a condition variable might be of interest in itself, the primary purpose of collecting the information was to take into account those differences in school and community, instructional staff and students in a given school that delimit what a school can accomplish with its pupils and avoid the invidious comparisons that can occur when faced with only national norms–or even state norms–as a baseline of comparison for a school.

The Regression Equation

Using the correlations of condition variables to the goal scores and the correlations of condition variables to one another for Phase II data, it was possible to determine what set of condition variables will best predict a school score on each goal. This technique of multiple regression analysis results in a regression equation for each goal. A predicted score is obtained by multiplying the school's standing on each of the condition variables which form the best set of predictors by predetermined weights and then adding a prediction constant.* Since a predicted score is not 100 per cent accurate, a prediction band is calculated by adding and subtracting one standard error of estimate from the predicted school score. Thus even prior to administering the questionnaires for the 10 goals, by knowing a school's standing on the condition variables, one can then give a range into which one would expect the school to score.

Schools Classified by Socioeconomic Status

To derive the regression equation, 5th grade schools are first partitioned by socioeconomic status (SES) into three categories and designated High SES, Middle SES or Low SES. The classification is determined primarily by the school standing on the following set of variables: FEDUC, MEDUC, FOCC, MOCC, SUBSIDY, HOUSING. A graphic display of the school's rank on these variables is found on page 13 of each elementary school report. Factor scores [standard z-scores] were used to classify the schools as follows:

High SES:	Factor score greater than 0.3258
Middle SES:	Factor score between -0.4520 and 0.3258 inclusive
Low SES:	Factor score less than -0.4520

[The cut-off points were selected to divide the Phase II elementary schools into three sets of equal number.]

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*Predicted score = $b_1x_1 + b_2x_2 + \ldots + b_nx_n + a$

Where b_i = regression weight for a condition variable
x_i = school score on the corresponding condition variable
a = prediction constant
n = number of variables used as predictors

Prediction band = Predicted score ± standard error of estimate

Separate Regressions

For schools falling into the High SES category the set of condition variables which will best predict a score on Goal I is statistically selected. To each variable regression weights are assigned which will optimize the prediction on Goal I for all High SES schools.

The procedure is reiterated for all remaining goal areas. The process is then repeated for all schools designated Middle SES and also Low SES.

Table 9 displays the variables thus selected, the regression weights assigned,* the prediction constant to be added and the standard error of estimate. It also includes the proportion of variance accounted for uniquely (the square of the semipartial correlation coefficient) by each variable used in the prediction equation.

Note on Teacher Salary

Although average teacher salary is collected and reported for each school, TSALARY is excluded from the potential predictor set and hence is not allowed to enter any predictions. Other financial figures which also fluctuate from year to year have been standardized; but the unavailability of statewide salary data by building makes the adjustment for TSALARY impossible.

Some Cautions

The table which follows is included only to avoid the *"black box"* syndrome. Multiple regression analysis is not magic. But it is open to grave misinterpretations. The reader must not isolate variables nor make cause-effect relationships. One variable may be a proxy for another because of the interrelationship (lack of independence) among condition variables. The statistically unsophisticated might better accept *"on faith"* the prediction process and forego any analysis lest misinterpretations arise.

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*The regression weights are to be multiplied by the raw score for the variable (as footnoted on page 18) except for the three financial variables SUBSIDY, INSEXADM, and EFFORT. Because of their year-to-year fluctuation, the raw scores are standardized before assigning regression weights. For these three variables the z-score must be multiplied by the regression weight.

$$\text{z-score} = \frac{\text{(District value) - (State Mean)}}{\text{(Standard deviation)}}$$

The state means and standard deviations for the variables are found at the bottom of Table 4.

TABLE 9

GOAL I· SELF UNDERSTANDING

Low SES			Middle SES			High SES		
Variable	Regression Weight	Explained Variance	Variable	Regression Weight	Explained Variance	Variable	Regression Weight	Explained Variance
TMEDUC	-.656	.076	LOCATION	.457	.080	TEXPER	.111	.073
RACE	1.201	.067	TEXPER	.094	.059	FOCC	.065	.057
PCTMW	-3.876	.059	HOUSING	.860	.051	INNOVATE	-.061	.056
INSEXADM	.703	.048	INTERRAC	2.255	.048	RACE	-5.672	.040
HOUSING	.653	.041	ATTEND	1.446	.023	SEX	-4.080	.033
INNOVATE	.053	.037	RACE	.928	.019	SUBSIDY	-.387	.026
EFFORT	-.480	.034	PCTMW	-2.293	.017	REACTL	-.190	.025
ENROLL	.002	.027	LIBRARY	-.382	.016	DISCREP	-.129	.018
CLPRACT	.090	.021	RECIDEA	.363	.011	INSEXADM	-.282	.014
DISCREP	-.221	.014	SEX	2.668	.009	INTERRAC	-1.330	.011
TCAREER	.115	.011						
LOCATION	.181	.010						

Prediction constant	75.27	Prediction constant	65.79	Prediction constant	122.78
Standard error of estimate	1.83	Standard error of estimate	1.80	Standard error of estimate	1.70
Per cent of explained variance	26.6	Per cent of explained variance	34.8	Per cent of explained variance	29.5

TABLE 9

GOAL II: UNDERSTANDING OTHERS

Low SES			Middle SES			High SES		
Variable	Regression Weight	Explained Variance	Variable	Regression Weight	Explained Variance	Variable	Regression Weight	Explained Variance
HOUSING	.782	.102	FAMSES	.080	.105	TSEX	2.025	.044
TCAREER	.271	.101	TSTABL	-1.586	.072	TLOCALE	-.554	.024
FEDUC	1.127	.066	PCTMW	-3.374	.065	FOCC	.041	.019
LOCATION	.302	.060	EFFORT	-.380	.063	FEDUC	.660	.018
TEDUC	-.721	.046	TLOCALE	1.316	.048	ATTEND	-.533	.016
TLOCALE	-1.060	.034	MEDUC	1.561	.048	EFFORT	.190	.016
TPPOS	-.193	.030	STAFFP	36.958	.029	RECIDEA	-.287	.014
TSTABL	.799	.019	INNOVATE	.026	.019	STAFFP	-24.700	.014
FOCC	-.040	.014	LIBRARY	.256	.018	REACTL	.094	.012
RECIDEA	.242	.014	TCOLLEGE	-.390	.017	BOOKSP	.007	.010
TEXPER	.030	.012	TSATISF	-.078	.017			
TSATISF	.060	.010	TMEDUC	-.149	.010			
CLPRACT	.050	.009	DISCREP	-.109	.005			
ATTEND	.418	.008						

Prediction constant	22.99	Prediction constant	26.22	Prediction constant	30.18
Standard error of estimate	1.26	Standard error of estimate	1.10	Standard error of estimate	1.04
Per cent of explained variance	42.5	Per cent of explained variance	35.3	Per cent of explained variance	50.1

TABLE 9

GOAL III-V: BASIC SKILLS--VERBAL

Low SES			Middle SES			High SES		
Variable	Regression Weight	Explained Variance	Variable	Regression Weight	Explained Variance	Variable	Regression Weight	Explained Variance
RACE	1.155	.120	HOUSING	.880	.058	FOCC	.099	.269
FEDUC	1.085	.071	SUBSIDY	-.670	.055	BOOKSP	.019	.050
ATTEND	1.055	.050	INSEXADM	-.554	.034	TSTABL	-.907	.041
TMEDUC	-.270	.024	TAGE	.204	.028	TPPOS	.241	.034
TCAREER	.123	.022	FEDUC	1.450	.025	TEXPER	-.064	.032
HOUSING	.382	.022	TCAREER	-.193	.023	TCOLLEGE	-.657	.025
RECIDEA	-.285	.018	MOCC	.033	.023	ATTEND	.620	.016
DISCREP	.162	.012	RACE	.863	.017	RACE	2.368	.015
ENROLL	.001	.010	ATTEND	1.012	.017	RECIDEA	.321	.014
			RECIDEA	-.381	.013	ENROLL	-.001	.013
			SEX	2.742	.010			

Prediction constant	.28	Prediction constant	-4.76	Prediction constant	4.00
Standard error of estimate	1.20	Standard error of estimate	1.80	Standard error of estimate	1.09
Per cent of explained variance	47.8	Per cent of explained variance	29.9	Per cent of explained variance	59.3

TABLE 9

GOAL III-M: BASIC SKILLS--MATH

Low SES			Middle SES			High SES		
Variable	Regression Weight	Explained Variance	Variable	Regression Weight	Explained Variance	Variable	Regression Weight	Explained Variance
RACE	1.258	.190	RACE	2.111	.054	FAMSES	.074	.176
DISCREP	.301	.035	MEDUC	1.187	.024	TEDUC	-.634	.052
TLOCALE	.697	.030	RECIDEA	-.346	.024	TPPOS	.231	.052
TPPOS	.183	.025	STAFFP	-36.243	.023	ATTEND	.923	.044
PCTMW	1.913	.019	TCOLLEGE	-.496	.022	TCAREER	-.169	.035
FEDUC	.528	.016	SUBSIDY	-.277	.022	BOOKSP	.013	.036
REACTL	-.148	.016	TPPOS	.163	.018	PCTMW	-2.102	.030
CLPRACT	.059	.013	ATTEND	.649	.015	RACE	2.246	.024
EFFORT	-.184	.010	DISCREP	-.170	.014	TSEX	-1.422	.022
			TSTABL	-.329	.007	SEX	-2.020	.017
						EFFORT	-.165	.014
						GUIDANCE	-.328	.013

Prediction constant	1.60	Prediction constant	5.02	Prediction constant	9.26
Standard error of estimate	1.35	Standard error of estimate	1.09	Standard error of estimate	1.00
Per cent of explained variance	44.3	Per cent of explained variance	45.0	Per cent of explained variance	48.1

TABLE 9

GOAL IV: INTEREST IN SCHOOL

Low SES			Middle SES			High SES		
Variable	Regression Weight	Explained Variance	Variable	Regression Weight	Explained Variance	Variable	Regression Weight	Explained Variance
FEDUC	2.885	.109	ATTEND	2.135	.054	SEX	8.721	.099
TSEX	-3.726	.040	INTERRAC	2.476	.048	CLPRACT	.217	.080
FAMSES	-.102	.035	PCTMW	-4.122	.040	ATTEND	-1.716	.054
LOCATION	.417	.030	CLPRACT	.153	.038	ENROLL	.002	.047
CLPRACT	.167	.029	LOCATION	.291	.023	TPPOS	-.220	.017
TCOLLEGE	1.193	.022	RECIDEA	.538	.017	RECIDEA	-.408	.010
TCAREER	.251	.017	TSEX	-2.412	.016			
TEXPER	.070	.017	INNOVATE	-.044	.016			
TFOCC	.249	.011	TMEDUC	-.385	.016			
HOUSING	.503	.011	TPPOS	.214	.011			
DISCREP	-.289	.009						
INNOVATE	.041	.009						
Prediction constant	41.78		Prediction constant	46.10		Prediction constant	44.29	
Standard error of estimate	2.80		Standard error of estimate	2.21		Standard error of estimate	1.98	
Per cent of explained variance	28.7		Per cent of explained variance	29.1		Per cent of explained variance	36.7	

TABLE 9

GOAL V: CITIZENSHIP

Low SES			Middle SES			High SES		
Variable	Regression Weight	Explained Variance	Variable	Regression Weight	Explained Variance	Variable	Regression Weight	Explained Variance
FEDUC	7.398	.133	PCTMW	-21.578	.088	SEX	18.828	.070
HOUSING	3.961	.084	HOUSING	3.442	.072	FOCC	.207	.068
TEXPER	.370	.067	FAMSES	.324	.059	RECIDEA	-2.049	.037
ATTEND	5.387	.047	TCOLLEGE	-3.826	.056	ATTEND	-3.559	.034
TSTABL	5.334	.032	RACE	4.627	.049	REACTL	.648	.031
TCAREER	.633	.022	SEX	19.521	.045	TFOCC	-.827	.028
TAGE	-.601	.014	FEDUC	5.563	.030	INSEXADM	-.972	.021
TLOCALE	-3.358	.012	TEXPER	.205	.026	TCAREER	.531	.018
BOOKSP	-.083	.011	CLPRACT	.366	.024	CLPRACT	.267	.018
RACE	1.527	.010	TLOCALE	2.974	.022	MOCC	.083	.016
			EFFORT	-1.071	.017	TLOCALE	1.922	.015
						TMEDUC	.855	.012
						ENROLL	.003	.011
Prediction constant		78.75	Prediction constant		48.20	Prediction constant		113.29
Standard error of estimate		6.73	Standard error of estimate		5.92	Standard error of estimate		5.16
Per cent of explained variance		38.8	Per cent of explained variance		36.3	Per cent of explained variance		35.5

TABLE 9

GOAL VI: HEALTH HABITS

Low SES			Middle SES			High SES		
Variable	Regression Weight	Explained Variance	Variable	Regression Weight	Explained Variance	Variable	Regression Weight	Explained Variance
RACE	1.375	.091	RACE	2.376	.139	BOOKSP	.022	.063
MEDUC	1.773	.067	TLOCALE	2.053	.046	LOCATION	-.238	.052
HOUSING	.871	.045	HOUSING	.749	.039	FOCC	.057	.028
TSTABL	1.767	.037	TSTABL	-1.910	.035	TCOLLEGE	-.665	.025
ATTEND	1.036	.020	MEDUC	2.042	.030	FEDUC	.964	.015
TLOCALE	-1.203	.017	TSEX	2.825	.029	TEXPER	.044	.015
TSEX	1.843	.017	GUIDANCE	-.815	.028	CLPRACT	-.060	.013
TFOCC	-.214	.014	DISCREP	.363	.023	EFFORT	-.214	.012
TEDUC	-.511	.010	TCOLLEGE	-.739	.021	LIBRARY	-.243	.010
			SEX	4.124	.021	INSEXADM	-.175	.008
			PCTMW	-3.147	.021	MEDUC	.497	.002
			EFFORT	-.343	.021			
			TPPOS	.269	.021			
			SUBSIDY	-.380	.018			
			TSATISF	.130	.017			
			FAMSES	.033	.006			
Prediction constant	4.79		Prediction constant	-8.98		Prediction constant	25.98	
Standard error of estimate	1.97		Standard error of estimate	1.65		Standard error of estimate	1.29	
Per cent of explained variance	41.5		Per cent of explained variance	44.3		Per cent of explained variance	44.5	

TABLE 9

GOAL VII: CREATIVITY

Low SES			Middle SES			High SES		
Variable	Regression Weight	Explained Variance	Variable	Regression Weight	Explained Variance	Variable	Regression Weight	Explained Variance
FEDUC	4.064	.099	RACE		.083	FOCC	.175	.123
TEXPER	.264	.085	HOUSING		.036	TEDUC	-1.593	.041
ATTEND	3.405	.048	TCOLLEGE		.031	RECIDEA	-1.235	.030
EFFORT	1.390	.047	SEX		.021	ATTEND	-2.202	.029
HOUSING	1.648	.040	FEDUC		.019	INTERRAC	-3.090	.022
TCAREER	.482	.030	STAFFP		.018	PCTMW	-4.958	.020
TAGE	-.442	.018	LOCATION		.016	CLPRACT	.152	.013
INSEXADM	-.908	.018	TAGE		.016	ENROLL	.002	.012
			BOOKSP		.015			
			SUBSIDY		.014			
			MEDUC		.012			
			TMEDUC		.010			
			EFFORT		.010			
Prediction constant		98.39	Prediction constant		78.27	Prediction constant		148.07
Standard error of estimate		4.57	Standard error of estimate		4.41	Standard error of estimate		3.50
Per cent of explained variance		31.3	Per cent of explained variance		29.1	Per cent of explained variance		34.7

TABLE 9

GOAL VIII: VOCATIONAL DEVELOPMENT

Low SES			Middle SES			High SES		
Variable	Regression Weight	Explained Variance	Variable	Regression Weight	Explained Variance	Variable	Regression Weight	Explained Variance
RACE	1.031	.149	RACE	2.139	.237	FOCC	.088	.088
TLOCALE	-.786	.051	TSTABL	-1.622	.068	BOOKSP	.018	.058
MEDUC	-.646	.027	MEDUC	1.329	.036	TPPOS	.268	.054
DISCREP	.222	.026	CLPRACT	.083	.035	LIBRARY	.346	.029
SUBSIDY	.287	.022	TPPOS	.198	.035	MOCC	.022	.021
FAMSES	.025	.012	INSEXADM	.238	.031	FEDUC	-.610	.014
			HOUSING	.398	.030	TSTABL	-.423	.012
			TLOCALE	1.042	.029	RACE	1.575	.011
			STAFFP	-33.926	.024	TEXPER	.032	.011
			EFFORT	-.228	.020			
			RECIDEA	.284	.018			
			GUIDANCE	-.405	.017			
Prediction constant	58.20		Prediction constant	42.45		Prediction constant	49.82	
Standard error of estimate	1.21		Standard error of estimate	1.08		Standard error of estimate	1.14	
Per cent of explained variance	35.9		Per cent of explained variance	39.1		Per cent of explained variance	41.5	

TABLE 9

GOAL IX: APPRECIATING HUMAN ACCOMPLISHMENTS

Low SES			Middle SES			High SES		
Variable	Regression Weight	Explained Variance	Variable	Regression Weight	Explained Variance	Variable	Regression Weight	Explained Variance
TCAREER	.404	.176	MEDUC	2.264	.061	SEX	8.504	.293
LOCATION	.262	.040	PCTMW	-2.787	.039	RACE	2.626	.033
TFOCC	.233	.030	RACE	-.814	.040	CLPRACT	.077	.031
SEX	2.080	.022	FEDUC	-1.398	.034	STAFFP	-33.345	.026
FAMSES	-.039	.019	HOUSING	.447	.032	LOCATION	.128	.024
DISCREP	.233	.018	EFFORT	-.252	.025	SUBSIDY	.248	.022
LIBRARY	-.285	.015	TFOCC	-.194	.021	TFOCC	-.134	.017
TSTABL	.429	.011	CLPRACT	.057	.015	FAMSES	.015	.011
BOOKSP	-.018	.010	TCOLLEGE	-.384	.015			
			ATTEND	.603	.013			
			SUBSIDY	.184	.011			

Prediction constant	43.43	Prediction constant	48.87	Prediction constant	23.66
Standard error of estimate	1.58	Standard error of estimate	1.26	Standard error of estimate	1.13
Per cent of explained variance	31.2	Per cent of explained variance	25.0	Per cent of explained variance	39.1

TABLE 9

GOAL X: PREPARATION FOR A CHANGING WORLD

Low SES			Middle SES			High SES		
Variable	Regression Weight	Explained Variance	Variable	Regression Weight	Explained Variance	Variable	Regression Weight	Explained Variance
FEDUC	7.723	.113	ENROLL	.005	.057	ATTEND	-4.179	.077
TCAREER	.711	.078	TEXPER	.158	.042	SEX	-13.016	.056
MEDUC	-5.100	.044	STAFFP	117.612	.029	HOUSING	-1.413	.024
ATTEND	2.784	.035	TMEDUC	-.759	.024	GUIDANCE	1.611	.022
INNOVATE	-.120	.034	FEDUC	2.523	.018	TAGE	-.515	.018
RACE	-1.422	.031	TSTABL	-1.471	.015	TPPOS	-.592	.016
FAMSES	-.202	.028	RACE	1.512	.013	TSATISF	.233	.015
SEX	-6.070	.025	EFFORT	-.500	.011	RECIDEA	-.936	.014
TPPOS	-.417	.013				TSEX	-3.990	.014
CLPRACT	.190	.017				BOOKSP	.024	.009
FOCC	.180	.013						
Prediction constant		90.83	Prediction constant		84.47	Prediction constant		150.50
Standard error of estimate		3.94	Standard error of estimate		4.02	Standard error of estimate		3.99
Per cent of explained variance		35.5	Per cent of explained variance		16.2	Per cent of explained variance		34.8

STUDENT DISTRIBUTIONS

A school mean alone disguises much about student performance on a given goal. Did all the students score close to the school mean or were the student scores widely divergent? Indeed, very different student distributions could result in similar mean scores.

With this in mind, the student scores from the Phase II normative sample were rank-ordered high to low and divided into five as nearly equal categories as possible, representing the scores obtained by the top 20 per cent of the students in the state, the next 20 per cent, down to the lowest-scoring 20 per cent of students. [In many cases since a student score was a whole number, slightly more--or less--than 20 per cent of the students scored at the point or above and a 19, 21 or 22 may appear.]

The chart below shows the form in which the distribution is reported for GOAL I, Self Understanding:

GOAL SCORE	*	STATE NORM	SCHOOL ACTUAL
95 and Above	*	21%	20%
90-94	*	19%	17%
85-89	*	20%	18%
80-84	*	21%	17%
79 and Below	*	19%	33%

The left column shows the cut-off scores which come closest to dividing the student scores into quintiles--five equal categories.

The middle column shows the exact percentages of students throughout the state whose scores placed them into each of these five categories. The School Actual column states the actual distribution of student scores for the given school.

KEY ITEMS

Statements that have a high item-to-total correlation or others of interest were selected from the goal instruments to suggest the type of items that comprise the questionnaire and to reveal to school personnel exactly what student responses resulted in the school mean and student distribution.*

One may have a personal criterion in mind as to how one would expect or desire students to reply to a given item. Moreover, to enable school personnel to compare the responses of their students to those throughout the state, the percentages stated under KEY ITEMS in the sample school report which follows represent the percentage responses over the entire state sample.

For goal areas which are of particular interest to a school, student responses to all items are available at the EQA Bureau office.

*Percentages may not total 100 because of rounding or because all students did not mark a valid response to that item.

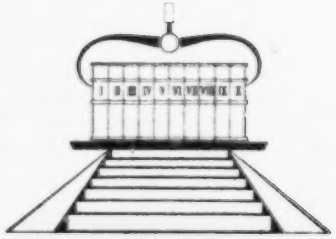
SAMPLE SCHOOL REPORT

The following pages replicate a school report. Pages 2 and 3 represent the results for a hypothetical Middle SES school with its important points noted.

Pages 4-6 display the 38 condition variables that were collected and an acronym or abbreviation for each. In a typical school report the school mean is given for each variable along with its corresponding percentile rank and the number of people whose replies were used to obtain the data.

Since the school mean score on some variables was obtained from pupil responses, for such variables, the itemized student replies are listed. The figures given here are the *state percentages* for the 20,000 students involved in the normative study. This allows anyone in an assessed school to compare its pupil responses with the state average.

Pages 7-12 of each school report give the student distribution and key item responses for each school. Again, to accommodate those who want to compare the pupil responses on key items to those throughout the state, the key item percentages that follow are the state percentages from the normative study.



Educational Quality Assessment

School Report: A Status Profile

Pennsylvania Department of Education 1972

1. STUDENT OUTPUTS:

A. GENERAL SUMMARY:

Note: Yellow pages 2 and 3 replicate the report for a sample Middle SES elementary school. Yellow page 13 graphically displays the variables used to classify the school as Middle SES.

Shortened name for the goal

Number of pupil booklets scored for this goal

Mean raw score expected for the school

GOAL	AREA	NUMBER STUDENTS	ACTUAL SCHOOL SCORE	ACTUAL PENNA. %ILE	PREDICTED SCORE RANGE
I	SELF UNDERSTANDING	30	85.57	29	85.80 - 89.40
II	UNDERSTANDING OTHERS	30	32.97	66	30.80 - 33.01
III-V	BASIC SKILLS: VERBAL	30	17.07	74	14.12 - 17.71
III-M	BASIC SKILLS: MATH	30	17.40	41	16.76 - 18.94
IV	INTEREST IN SCHOOL	30	59.73	54	56.66 - 61.08
V	CITIZENSHIP	30	165.70	76	154.22 - 166.06
VI	HEALTH HABITS	30	30.33	48	28.04 - 31.35
VII	CREATIVITY	30	137.87	50	133.40 - 142.23
VIII	VOCATIONAL DEVELOPMENT	30	58.07	13	60.07 - 62.24
IX	APPRECIATING HUMAN ACCOMPLISHMENTS	30	52.23	62	51.07 - 53.60
X	PREPARING FOR A CHANGING WORLD	30	105.13	85	98.16 - 104.18

Mean raw score of the pupil booklets scored

Percentile based on Phase II norms

FOR A COMPLETE DESCRIPTION OF EACH CONDITION VARIABLE, SEE BURSCN, WILLIAM W. MANUAL FOR INTERPRETING SCHOOL REPORTS, 1972-73: HARRISBURG: BUREAU OF EDUCATIONAL QUALITY ASSESSMENT, PENNSYLVANIA DEPARTMENT OF EDUCATION, 1972, TABLES 1-8, PP. 4-17.

N.B. FOR A COMPLETE STATEMENT OF EACH GOAL, SEE PP. 2-5 OF THE INTERPRETATION MANUAL.

FOR A DISCUSSION OF PREDICTION PROCEDURE, SEE PP. 18-19 OF THE INTERPRETATION MANUAL.

8. PERCENTILE BANDS BY GOALS:

CONFIDENCE INTERVALS

PERCENTILES

GOAL	AREA	1 2 5 10 20 30 40 50 60 70 80 90 95 98 99
I	SELF UNDERSTANDING	M AXXXXXXXPXXXXXXXX
II	UNDERSTANDING OTHERS	M XXXXXXXPXXXXXXA
III-V	BASIC SKILLS: VERBAL	M XXXXXXXXPXXXXXAXXX
III-M	BASIC SKILLS: MATH	M XXXAXPXXXXXXX
IV	INTEREST IN SCHOOL	M XXXXXXXPAXXXXXXXXX
V	CITIZENSHIP	M XXXXXXPXXXXXXXA
VI	HEALTH HABITS	M XXXXXXXPXXXXXAX
VII	CREATIVITY	M XXXXXXXAXXXXXXX
VIII	VOCATIONAL DEVELOPMENT	A M XXXXXXXPXXXXXXX
IX	APPRECIATING HUMAN ACCOMPLISHMENTS	M XXXXXXXXXAPXXXXXXX
X	PREPARING FOR A CHANGING WORLD	M XXXXXXXXXXXXPXXXXXXXX A

N.B. AN "A" IN THE TABLE DESIGNATES THE LOCATION OF THE OBSERVED, ACTUAL SCHOOL VALUE.
A "P" DESIGNATES THE LOCATION OF THE PREDICTED SCHOOL VALUE.
"M" IS USED TO REPRESENT THE MEDIAN (50TH %ILE).
THE XX ... XX BAND IS THE PREDICTION BAND.

IF NO "P" IS SHOWN, THE ACTUAL AND PREDICTED VALUES SHARE THE SAME LOCATION.

2. INDEPENDENT (PREDICTOR) VARIABLES:

A. SCHOOL AND COMMUNITY INDICES:

Note: All numbers included in the report model on yellow pages 4-12 are the state means or state percenteges for the variables or responses listed.

CHARACTERISTIC		ACRONYM	MEAN	PENNA. TILE	NUMBER REPLYING
PROGRAM RESOURCES	STAFF:PUPIL RATIO	STAFFP	0.0390	55	
	BOOKS:PUPIL RATIO	BOOKSP	11.3800	71	
	SCHOOL INNOVATION	INNOVATE	32.1600	51	
	ACCESSIBILITY OF LIBRARY	LIBRARY	3.4300	50	
FINANCIAL	SCHOOL SUBSIDY PER WADM	SUBSIDY	368.5198	47	
	INSTRUCTIONAL EXPENSES PER ADM	INSEXADM	519.5598	58	
	TAX EFFORT INDEX	EFFORT	25.6600	58	
DEMOGRAPHIC	SCHOOL ENROLLMENT	ENROLL	343.0000	60	
	PREDICTED ACHIEVEMENT INDEX BY LOCATION	LOCATION	2.5600	61	
	INTERRACIAL EXPOSURE	INTERRAC	1.4000	57	
	TYPES OF RESIDENCES IN SCHOOL'S COMMUNITY	HOUSING	3.2550	47	

PERCENTAGE OF RESPONSES ON PUPIL INFORMATION ITEMS

****

<<< LIBRARY >>>

HOW OFTEN ARE YOU ABLE TO USE THE SCHOOL LIBRARY?

AS OFTEN AS I NEED TO	34%
FREQUENTLY, BUT NOT AS OFTEN AS I WOULD LIKE TO	15%
ONLY TWO OR THREE DAYS A WEEK	11%
ONLY WHEN MY CLASS IS SCHEDULED FOR LIBRARY WORK	31%
THERE IS NO LIBRARY IN THIS SCHOOL	4%

****

<<< LOCATION >>>

IN WHAT TYPE OF COMMUNITY ARE YOU NOW LIVING?

IN THE OPEN COUNTRY OR IN A FARMING COMMUNITY	18%
IN A SMALL TOWN (LESS THAN 10,000 PEOPLE) THAT IS NOT A SUBURB	21%
INSIDE A MEDIUM SIZE CITY (10,000 TO 100,000 PEOPLE)	17%
IN A SUBURB OF A MEDIUM SIZE CITY	8%
INSIDE A LARGE CITY (100,000 TO 500,000 PEOPLE)	8%
IN A SUBURB OF A LARGE CITY	7%
IN A VERY LARGE CITY (OVER 500,000 PEOPLE)	7%
IN A SUBURB OF A VERY LARGE CITY	7%

****

****

<<< INTERRAC >>>

THIS YEAR, ARE YOU IN ANY CLASSES OR SCHOOL ACTIVITIES WITH PUPILS WHOSE RACE IS DIFFERENT FROM YOUR OWN?

YES	42%
NO	55%

****

B. INSTRUCTIONAL STAFF INDICES:

CHARACTERISTIC		ACRONYM	MEAN	PENNA. %ILE	NUMBER REPLYING
BACKGROUND	EDUCATIONAL LEVEL OF TEACHER'S MOTHER	TMEDUC	3.5240	51	
	OCCUPATIONAL LEVEL OF TEACHER'S FATHER	TFOCC	4.0830	55	
	TEACHER LOCALE	TLOCALE	4.3590	55	
	TEACHER'S COLLEGE	TCOLLEGE	2.2270	50	
	TEACHER'S EDUCATION	TEDUC	3.8700	46	
	TEACHER STABILITY	TSTABL	4.4590	47	
DEMOGRAPHIC	TEACHER'S AGE	TAGE	4.6670	53	
	TEACHER'S SEX	TSEX	1.8220	43	
	TEACHER EXPERIENCE	TEXPER	15.3300	55	
	TEACHER PRESENT POSITION	TPPOS	4.6050	49	
	TEACHER SALARY	TSALARY	9312.0586	49	
ATTITUDINAL	TEACHER SATISFACTION	TSATISF	21.4100	48	
	TEACHER CLASSROOM PRACTICES	CLPRACT	41.6600	48	
	PERCEPTION OF ACTUAL CHARACTERISTICS INFLUENCING PROFESSIONAL RECOGNIT'N	REACTL	3.0140	57	
	PERCEPTION OF IDEAL CHARACTERISTICS INFLUENCING PROFESSIONAL RECOGNIT'N	RECIDEA	1.6870	65	
	TEACHER CAREER	TCAREER	7.2970	44	
	DISCREPANCY	DISCREP	4.1810	55	

C. STUDENT INDICES:

CHARACTERISTIC		ACRONYM	MEAN	PENNA. RILE	NUMBER REPLYING
BACKGROUND	FATHER'S OCCUPATION	FOCC	32.0200	56	
	MOTHER'S OCCUPATION	MOCC	32.4900	51	
	PERCENTAGE OF MOTHERS WORKING	PCTMW	26.0000	51	
	FAMILY SOCIOECONOMIC STATUS	FAMSES	37.3000	54	
	MOTHER'S EDUCATION	MEDUC	3.7500	51	
	FATHER'S EDUCATION	FEDUC	3.7900	54	
DEMOGRAPHIC	SEX OF STUDENTS	SEX	1.4900	52	
	PREDICTED ACHIEVEMENT INDEX BY RACE	RACE	4.4800	8	
	ATTENDANCE	ATTEND	3.8500	48	

PERCENTAGE OF RESPONSES ON PUPIL INFORMATION ITEMS

****

<<< RACE >>>

WHICH OF THE FOLLOWING BEST DESCRIBES YOU?

BLACK	6%
WHITE	83%
AMERICAN INDIAN	3%
ORIENTAL	1%
PUERTO RICAN	1%
OTHER	2%

****

<<< ATTEND >>>

HOW MANY DAYS WERE YOU ABSENT DURING THE PAST SCHOOL YEAR?

NONE	30%
1-5 DAYS	40%
6-10 DAYS	12%
11-15 DAYS	6%
MORE THAN 15 DAYS	8%

****

3. EQA GOALS, DISTRIBUTIONS AND KEY ITEMS:

****** GOAL I - SELF-UNDERSTANDING ******

STUDENT DISTRIBUTION

GOAL SCORE	STATE NORM	SCHOOL ACTUAL
95 AND ABOVE	21%	
90-94	19%	
85-89	20%	
80-84	21%	
79 AND BELOW	19%	

KEY ITEMS

QUESTIONNAIRE STATEMENTS	RESPONSE OPTIONS: LIKE ME	UNLIKE ME
MY PARENTS UNDERSTAND ME.	73%	21%
THERE ISN'T MUCH OF A CHANCE FOR A PERSON LIKE ME TO SUCCEED IN LIFE.	29%	67%
I'M PROUD OF MY SCHOOL WORK.	65%	31%

****** GOAL II - UNDERSTANDING OTHERS ******

STUDENT DISTRIBUTION

GOAL SCORE	STATE NORM	SCHOOL ACTUAL
37 AND ABOVE	20%	
35-36	20%	
32-34	21%	
28-31	20%	
27 AND BELOW	19%	

KEY ITEMS

QUESTIONNAIRE STATEMENTS	RESPONSE OPTIONS: I WOULD LIKE IT	I WOULDN'T MIND IT	I WOULD RATHER NOT	I WOULD DISLIKE IT	I CANNOT SAY
HOW WOULD YOU FEEL ABOUT SITTING IN CLASS NEXT TO A PERSON WHOSE SKIN COLOR IS DIFFERENT FROM YOUR OWN?	15%	60%	6%	4%	11%
HOW WOULD YOU FEEL ABOUT SITTING IN CLASS NEXT TO A PERSON WHOSE IDEAS ABOUT GOD ARE VERY DIFFERENT FROM YOUR OWN?	9%	46%	10%	11%	20%
HOW WOULD YOU FEEL ABOUT SITTING IN CLASS NEXT TO A PERSON WHOSE FAMILY IS MUCH POORER THAN YOURS?	12%	55%	6%	7%	16%

****** GOAL III - BASIC SKILLS: VERBAL ******

STUDENT DISTRIBUTION

GOAL SCORE	STATE NORM	SCHOOL ACTUAL
22 AND ABOVE	18%	
18-21	20%	
15-17	19%	
12-14	22%	
11 AND BELOW	21%	

KEY ITEMS

QUESTIONNAIRE STATEMENTS	RESPONSE OPTIONS

GOAL III-V HAS NO KEY ITEMS

****** GOAL III - BASIC SKILLS: MATH ******

STUDENT DISTRIBUTION

GOAL SCORE	STATE NORM	SCHOOL ACTUAL
22 AND ABOVE	21%	
19-21	22%	
17-18	17%	
14-16	21%	
13 AND BELOW	19%	

KEY ITEMS

QUESTIONNAIRE STATEMENTS	RESPONSE OPTIONS

GOAL III-M HAS NO KEY ITEMS

****** GOAL IV - INTEREST IN SCHOOL ******

STUDENT DISTRIBUTION

GOAL SCORE	STATE NORM	SCHOOL ACTUAL
67 AND ABOVE	20%	
62-66	19%	
57-61	21%	
52-56	20%	
51 AND BELOW	20%	

KEY ITEMS

QUESTIONNAIRE STATEMENTS	RESPONSE OPTIONS				
	ALMOST ALWAYS	OFTEN	SOMETIMES	SELDOM	ALMOST NEVER
I LIKE SCHOOL.	35%	14%	22%	9%	15%
OUR SCHOOL BUILDING IS NICE TO BE IN.	37%	19%	22%	9%	9%

****** GOAL V - CITIZENSHIP ******

STUDENT DISTRIBUTION

GOAL SCORE	STATE NORM	SCHOOL ACTUAL
182 AND ABOVE	20%	
170-181	20%	
156-169	20%	
139-155	20%	
138 AND BELOW	20%	

KEY ITEMS

QUESTIONNAIRE STATEMENTS	RESPONSE OPTIONS				
	NEVER	VERY SELDOM	SOMETIMES	MOST OF THE TIME	ALWAYS
IF A STORE CLERK GAVE ME TOO MUCH CHANGE, I WOULD RETURN THE EXTRA MONEY.	9%	7%	12%	13%	55%
	DISAGREE STRONGLY	DISAGREE	NEITHER AGREE OR DISAGREE	AGREE	AGREE STRONGLY
IT'S OKAY TO BREAK A SCHOOL RULE IF EVERYONE ELSE IS BREAKING IT.	49%	22%	14%	10%	9%

****** GOAL VI - HEALTH HABITS ******

STUDENT DISTRIBUTION

GOAL SCORE	STATE NORM	SCHOOL ACTUAL
35 AND ABOVE	18%	
31-34	23%	
28-30	18%	
23-27	20%	
22 AND BELOW	21%	

KEY ITEMS

QUESTIONNAIRE STATEMENTS	RESPONSE OPTIONS	
WHICH OF THE FOLLOWING IS NOT LIKELY AN EFFECT OF SMOKING?		
	A. SHORTNESS OF BREATH	9%
	B. LUNG CANCER	23%
	C. GOOD APPETITE	64%
WHEN SHOULD BOYS AND GIRLS HAVE A HEALTH EXAMINATION?		
	A. ONLY WHEN THEY ARE SICK	10%
	B. ONLY WHEN THEIR PARENTS CAN AFFORD IT	13%
	C. AT LEAST EVERY THREE YEARS	73%

****** GOAL VII - CREATIVITY ******

STUDENT DISTRIBUTION

GOAL SCORE	STATE NORM	SCHOOL ACTUAL
153 AND ABOVE	20%	
143-152	20%	
134-142	20%	
124-133	20%	
123 AND BELOW	20%	

KEY ITEMS

QUESTIONNAIRE STATEMENTS	STRONGLY AGREE	AGREE	UNCERTAIN	DISAGREE	STRONGLY DISAGREE
PICTURES OF GRASS SHOULD BE COLORED ONLY GREEN.	13%	16%	16%	31%	23%
I ENJOY LEARNING HOW TO DO SOMETHING IN A NEW AND DIFFERENT WAY.	34%	37%	14%	6%	4%

****** GOAL VIII - VOCATIONAL DEVELOPMENT ******

STUDENT DISTRIBUTION

GOAL SCORE	STATE NORM	SCHOOL ACTUAL
65 AND ABOVE	20%	
61-64	23%	
59-60	17%	
56-58	20%	
55 AND BELOW	20%	

KEY ITEMS

QUESTIONNAIRE STATEMENTS	RESPONSE OPTIONS: TRUE	FALSE
YOU GET INTO AN OCCUPATION MOSTLY BY CHANCE.	37%	57%
I HAVE LITTLE OR NO IDEA WHAT WORKING WILL BE LIKE.	48%	48%

****** GOAL IX - APPRECIATING HUMAN ACCOMPLISHMENTS ******

STUDENT DISTRIBUTION

GOAL SCORE	STATE NORM	SCHOOL ACTUAL
57 AND ABOVE	21%	
54-56	20%	
51-53	21%	
48-50	17%	
47 AND BELOW	21%	

KEY ITEMS

QUESTIONNAIRE STATEMENTS	RESPONSE OPTIONS: YES	NO	CANNOT SAY
*WOULD YOU LIKE TO TAKE PART IN MUSICAL ACTIVITIES?	48%	31%	17%
*WOULD YOU LIKE TO VISIT A THEATER TO SEE A PLAY?	80%	8%	8%

****** GOAL X - PREPARING FOR A CHANGING WORLD ******

STUDENT DISTRIBUTION

GOAL SCORE	STATE NORM	SCHOOL ACTUAL
115 AND ABOVE	20%	
106-114	19%	
97-105	21%	
88-96	20%	
87 AND BELOW	20%	

KEY ITEMS

QUESTIONNAIRE STATEMENTS	RESPONSE OPTIONS		
	I LIKE IT	I CANNOT SAY	I DO NOT LIKE IT
IN 1989 THERE WILL BE NO ATTENDANCE RULES. PUPILS CAN USE THE SCHOOL BUILDING AS MANY DAYS EACH YEAR AS THEY WISH. PUPILS CAN COME AND GO ANYTIME.	44%	15%	37%
IN 1989 THERE WILL BE NO REQUIRED SUBJECTS. PUPILS CAN TAKE ANY SUBJECTS THEY WISH TO TAKE.	54%	16%	24%

4. SES PROFILE:

SES CONDITION VARIABLES

PENNA. %ILE	FEDUC	MEDUC	FOCC	MOCC	SUBSIDY	HOUSING
95						
90				X		
85						
80						
75						
70						
65					X	
60						
55	X	X			X	
50						
45						
40						
35						
30			X			
25						
20						
15						
10						
5						
ACTUAL %ILE/ VALUE	57 3.83	56 3.80	30 25.73	87 47.25	58 397.00	66 3.67

SES = 0.0640

****
****
****

END OUTPLT FOR SAMPLE SCHOOL IC = 499.

****
****
****

Appendices

PENNSYLVANIA DEPARTMENT OF EDUCATION QUALITY ASSESSMENT TEACHER QUESTIONNAIRE ED 069809

DEBE 458 '70 (FORMERLY PIBE 458)

INSTRUCTIONS: The information received will be massed and reported as relationships to student output. No individual information will be reported or identification be made. Respond to the items by [illegible] the appropriate space. Code the school name and number (available from representative). EXAMPLE: Are you a teacher? Yes ■ No USE PENCIL ONLY

TLOCALE
Where did you graduate from high school?

- In another country
- In Puerto Rico or another U.S. possession
- In another state in the United States
- In this state but outside this city or immediate area
- In this town, city, or immediate area

TSTABL
Where have you spent most of your life?

- In another country
- In Puerto Rico or another U.S. possession
- In another state in the United States
- In this state but outside this city or immediate area
- In this town, city, or immediate area

Type of institution where undergraduate degree was granted

- Do not have a college degree
- State college
- Liberal arts college or university

TCOLLEGE

How much formal education did your mother or female guardian have?

TMEDUC

- None
- Elementary
- Some secondary
- Graduated high school
- Some post-high school
- Graduated from college
- Masters degree
- Some work toward a Ph.D. or professional degree
- Completed Ph.D. or professional degree

Which of the following categories best describes the occupation of the principal wage earner in your family while you were growing up?

TFOCC

- Unskilled
- Semi-skilled worker, operative
- Skilled worker, craftsman, foreman
- Farmer
- Salesman, clerical and similar white collar
- Owner of small business
- Teacher, instructor
- Accountant, buyer, manager or official of a large enterprise
- Professional, doctor, lawyer

What characteristic do you think actually counts most in gaining professional recognition in this school system?

REACTL

- Quality and quantity of work done
- Dependability
- Imaginativeness, inventiveness, creativity
- Seniority
- Formal education completed
- How well one is liked by his immediate supervisor
- How well one is liked by the people in the central office

What characteristic do you think should count most in gaining professional recognition in this school system?

RECIDEA

- Quality or quantity of work done
- Dependability
- Imaginativeness, inventiveness, creativity
- Seniority
- Formal education completed
- How well one is liked by his immediate supervisor
- How well one is liked by the people in the central office

If you would like to be working in education five years from now, what would you like to be doing?

TCAREER

- I do not wish to be working in education five years from now
- Superintendent
- Administrator in a central office
- Principal or assistant principal
- Curriculum director, supervisor or coordinator
- Guidance or psychological service
- Research worker
- Special services (Speech, reading)
- Teacher
- I will retire within five years

What is your salary for the present school year?

- Less than $6000
- $6000 to $6600
- $6601 to $7200
- $7201 to $7800
- $7801 to $8400
- $8401 to $9000
- $9001 to $9600
- $9601 to $10,200
- $10,201 to $10,800
- Over $10,800

Total number years completed in your present position

TPPOS

- Less than one year
- 1 year
- 2 years
- 3-5 years
- 6-10 years
- 11-15 years
- 16-20 years
- 20 or more years

PRINT SCHOOL NAME
Darken Matching Grids Below

SEX

Male Female

TAGE AGE

Years	TEACHER NUMBER	SCHOOL NUMBER
20-24		
25-29		
30-34		
35-39		
40-44		
45-49		
50-54		
55-59		
60 or over		

APPENDIX A

0 0 2 0 0 9

PENNSYLVANIA DEPARTMENT OF EDUCATION QUALITY ASSESSMENT TEACHER QUESTIONNAIRE

TEACHER NUMBER 0 1 2 3 4 5 6 7 8 9

SCHOOL NUMBER 0 1 2 3 4 5 6 7 8 9

PAGE 2
USE PENCIL ONLY

THE FOLLOWING STATEMENTS REFER TO ASPECTS OF ANY SCHOOL. PLEASE INDICATE WHAT EXTENT EACH OF THESE STATEMENTS DESCRIBES THE CLIMATE OF YOUR SCHOOL.

Almost Never
Infrequently
Sometimes
Frequently
Almost Always

TSATISF

I find my job very exciting and rewarding.....
I am just a cog in the machinery of this school.....
I feel involved in a lot of activities that go on in this school.....
I do things at school that I wouldn't do if it were up to me .....
I really don't feel satisfied with a lot of things that go on in this school.....
I have a lot of influence with my colleagues on educational matters .....

IN GENERAL, WHAT DO YOU FEEL IS THE RELATIVE INFLUENCE EACH OF THE FOLLOWING GROUPS OR PERSONS HAVE ON EDUCATIONAL MATTERS IN YOUR SCHOOL?

A great deal
Considerable
Some
Little
None

HOW MUCH RELATIVE INFLUENCE DO YOU THINK THESE GROUPS OR PERSONS OUGHT TO HAVE IN DETERMINING EDUCATIONAL MATTERS IN YOUR SCHOOL?

A great deal
Considerable
Some
Little
None

DISCREP

The local school board.....
Your superintendent .....
The principal of your school .....
You yourself.....
A small group of teachers .....
Teachers in general.....
Curriculum personnel (supervisor, director or coordinator)..
Students .....
Parents .....
Teacher organizations.....
Local colleges .....
Guidance and psychological personnel .....
Newspapers .....
P.T.A. (Parent-Teacher Association).....

HERE IS A LIST OF SOME CLASSROOM TEACHING PRACTICES. FOR EACH PRACTICE CHECK THE APPROPRIATE COLUMN AS IT PERTAINS TO YOU.

Am using it regularly
Use it occasionally
Have considered trying
Have never tried it
Don't agree with the practice

CLPRACT

Pupil participation in lesson planning.....
Pupil participation in classroom teaching.....
Having pupils work in small learning teams.....
Role playing (acting out situations).....
Use of games to aid learning.....
Pupil evaluation of classroom climate.....
Pupil participation in developing classroom rules.....
Involving pupils in community projects.....
Utilizing local citizens as resource personnel .....
Pupils as helpers or tutors of other pupils.....
Others .....

DEBE 458 PAGE 2

OPTICAL SCANNING FORMS by OPTICAL SCANNING CORPORATION

APPENDIX B

COMMONWEALTH OF PENNSYLVANIA - DEPARTMENT OF EDUCATION

ED 069810

SCHOOL INFORMATION

PHASE III - QUALITY ASSESSMENT PROGRAM

DATE

DEBE-461 (6/72)

INSTRUCTIONS: The questions which follow refer to the particular school which is participating in Phase III of the Quality Assessment Program. The name and number of the school appear below. Please answer the questions as accurately as you can since the accuracy of these answers is of utmost importance to your school's assessment program. Mark your answers as shown in examples.

Examples: If answer is 5 = [0][0][0][5] If answer is 53 = [0][0][5][3] If answer is 504 = [0][5][0][4]

NAME OF SCHOOL	SCHOOL DISTRICT	SCHOOL POSITION OF PERSON FILLING OUT THIS FORM	SCHOOL EQA NUMBER (1 - 3)

1. The number of staff personnel who spend at least one half their time in instructional activity in the school. **STAFFP** (4 - 6)

2. Total enrollment of the school as of October 1, 1972. **ENROLL** (7 - 10)

3. Number of library books which are available for student checkout. If a bookmobile serves the school, use the total books available at the building in a school year and place a check here ( ). **BOOKSP** (11 - 15)

4. Sum of hours worked in the school per week by all nonprofessional teacher aides including secretaries assigned to teaching staff and personnel whose primary function is to aid classroom teachers. (16 - 18)

5. Approximately what percentage of the residences in the area served by your school are best described as:

a.	Expensive private homes	(19 - 21)
b.	Moderate priced homes	(22 - 24)
c.	Low cost homes **HOUSING**	(25 - 27)
d.	High rental apartments	(28 - 30)
e.	Moderate rental apartments	(31 - 33)
f.	Low rental apartments	(34 - 36)

FOR USE BY HIGH SCHOOLS ONLY

6. Number of personnel who spend at least 50 per cent of their time as guidance counselors, i.e., personnel whose specific duties are those of counseling and advising students. **GUIDANCE** (37 - 38)

7. Holding power of this high school, record as per cent to one decimal place. **HOLDING** (39 - 41)

$$\frac{\text{Graduating Class of 1972} + \text{Transfers} - \text{New Students}}{\text{10th Grade Enrollment, September, 1969}}$$

Transfers refers to those students who left school after beginning 10th grade to attend another school, including full-time vocational students. Also include as transfers all students beginning 10th grade who have died, have become physically or mentally incapacitated or committed to a correctional institution. (Refer to DEBE-482, Summary of Annual Attendance Report, Item 21, Withdrawals, W_1 to W_5 inclusive, W_9, W_{10}, W_{11}, W_{12}, and W_{14}.)

CHECK EVERY GRADE LEVEL HOUSED IN SCHOOL BUILDING

K	1	2	3	4	5	6	7	8	9	10	11	12	Nongraded	Special Ed.
(42)	(43)	(44)	(45)	(46)	(47)	(48)	(49)	(50)	(51)	(52)	(53)	(54)	(55)	(56)

ERE IS A LIST OF SOME RELATIVELY NEW EDUCATIONAL PRAC-ICES. FOR EACH PRACTICE CHECK THE APPROPRIATE BLOCK AS PERTAINS TO THE PARTICIPATING SCHOOL **INNOVATE**	HAVE NEVER TRIED IT	DON'T AGREE WITH THE PRACTICE	HAVE CONSIDERED TRYING IT	USE IT OCCASION-ALLY	AM USING IT REGULARLY
	1	2	3	4	5
. INDEPENDENT STUDY. Regularly scheduled work by individual pupils with a minimum of teacher direction (57)					
. NONGRADED CLASSES. Pupils are assigned to classes on the basis of ability without regard to traditional one-year steps (58)					
. TEACHER AIDES. Regular employment of persons to assist the teacher in the classroom in administrative and other nonteaching functions (59)					
. LAY READERS. Regular employment of persons to assist the teacher in reading and grading the written work of pupils (60)					
. PROGRAMMED INSTRUCTION. The use of educational material so designed that each pupil works at his own pace through sequential steps, receiving immediate indication of the correctness of response he has given to programmed questions. May or may not involve mechanical devices or "machines" (61)					
WORK EXPERIENCE PROGRAMS. Programs in which students, while in school or on vacation, undertake employment under school guidance directly related to their educational courses (62)					
INSTRUCTIONAL TELEVISION. Regularly scheduled in-class viewing of televised instruction coordinated with instruction on the same material by the classroom teacher (63)					
FLEXIBLE SCHEDULING. Situation in which class size, length of class meetings, number and spacing of classes are varied according to an assessment of the nature of the subject, type of instruction and ability and interest of students (64)					
STUDENT TUTORING PROGRAM. Students who excel in a given subject area volunteer to help students having difficulty in that area (65)					
LANGUAGE LABORATORY. Audio equipment arranged to permit individual members of a class to hear speech, practice speaking and hear play back (66)					
OTHER (SPECIFY). (67)					
FOR ELEMENTARY SCHOOLS ONLY	1	2	3	4	5
DEPARTMENTALIZATION (68)					

Does your school have the services of a guidance counselor assigned specifically to the elementary school program on a regular basis? (69)

(2) ☐ Yes (1) ☐ No

FOR BUREAU USE ONLY

Insexadm ☐☐☐ (70-72)

Subsidy ☐☐☐ (73-75)

Effort ☐☐☐ (76-78)

56

APPENDIX C
LIST OF OCCUPATIONS FOR FOCC AND MOCC

LIST OF OCCUPATIONS

HEALTH SERVICES

001 Dentist
002 Physician, Osteopath, or Surgeon
003 Pharmacist
004 Optometrist or Chiropractor
005 Veterinarian
006 Medical or Dental Technician
007 Nurse
008 Practical Nurse
009 Hospital Attendant

EDUCATION

010 Administrator
011 Teacher or Instructor
012 Librarian
013 Library Assistant or Teacher Aide

INDUSTRY - FACTORY

014 Industrial Foreman
015 Toolmaker
016 Stationary Engineer
017 Metal Worker
018 Machinist
019 Millwright
020 Jobsetter
021 Welder or Flame-Cutter
022 Metal Filer, Grinder, or Polisher
023 Craneman, Derrickman, or Hoistman
024 Furnaceman, Smelterman, or Pourer
025 Operator of Industrial Equipment
026 Operator in Laundry
027 Metal Molder
028 Quarry Worker
029 Packer, Wrapper, or Grader
030 Laborer
031 Textile Spinner or Weaver
032 Motorman
033 Miner

CONSTRUCTION

034 Architect
035 Manager, Owner, or Official
036 Electrician
037 Foreman
038 Plumber
039 Brickmason, Tilesetter, or Glazier
040 Plasterer
041 Stone Mason, Cutter or Carver
042 Heavy Equipment Operator
043 Cabinetmaker
044 Carpenter
045 Painter
046 Roofer
047 Paperhanger, Carpet or Tile Layer
048 Laborer
049 Lumberman

TRANSPORTATION

050 Pilot
051 Manager, Owner, or Official
052 Locomotive Engineer
053 Railroad Conductor
054 Locomotive Fireman
055 Railroad Brakeman or Switchman
056 Inspector of Vehicles
057 Dispatcher
058 Deliveryman
059 Bus Driver
060 Shipping Clerk
061 Truck Driver
062 Taxi Driver
063 Laborer

COMMUNICATION OR PUBLIC UTILITY

064 Editor, Reporter, or Author
065 Manager, Owner, or Official
066 Technician
067 Postmaster
068 Foreman
069 Lineman or Serviceman
070 Telephone or Telegraph Operator
071 Laborer

SERVICE WORKERS

072 Printing Craftsman
073 Decorator
074 Policeman or Detective
075 Fire Fighter
076 Appliance/Office Machine Repairman
077 Butcher
078 Mechanic
079 Tailor
080 Baker
081 Equipment Maintenance Man
082 Service Station Attendant
083 Member of Armed Forces
084 Watchman or Guard
085 Barber or Beautician
086 Waiter, Waitress, or Bartender
087 Cook
088 Janitor or Cleaning Woman
089 Sanitation Worker

AGRICULTURE

090 Landscaper or Tree Surgeon
091 Farm Manager
092 Farmer
093 Laborer

CLERICAL WORKERS

094 Stenographer, Typist, or Secretary
095 Mail Carrier or Clerk
096 Bank Teller
097 Bookkeeper
098 Office Machine Operator
099 Cashier or Office Clerk
100 Collector
101 Messenger

SALES WORKERS

102 Stock Broker
103 Advertising Agent
104 Insurance Agent
105 Industrial Sales Worker
106 Real Estate Agent
107 Wholesale Trade Sales Worker
108 Retail Trade Sales Worker

BUSINESS OTHER THAN SALES

109 Personnel Worker
110 Accountant or Auditor
111 Buyer or Purchasing Agent
112 Credit Man
Manager, Owner, or Official
113 of a Bank or Finance Institution
114 of an Insurance Company
115 of a Real Estate Agency
116 of an Industry
117 of a Wholesale Trade
118 of a Car Dealership
119 of a Department, Clothing or Furniture Store
120 of a Hardware, Implement or Building Material Supplier
121 of a Food Store
122 of an Eating Place or Drinking Place
123 of a Repair Service
124 of a Service Station
125 of a Junkyard

OTHER PROFESSIONAL AND TECHNICAL WORKERS

126 Lawyer or Judge
127 Engineer
128 Social Scientist
129 Natural Scientist
130 Draftsman or Artist
131 Social Worker
132 Undertaker
133 Clergyman
134 Musician or Entertainer
135 Photographer
136 Surveyor
137 Dietitian

SPECIAL

200 Housewife
300 Unemployed
400 Pensioned
500 Student
600 Not Living at Home
700 Deceased

APPENDIX D
NORMAL CURVE WITH Z-SCORES AND PERCENTILE EQUIVALENTS